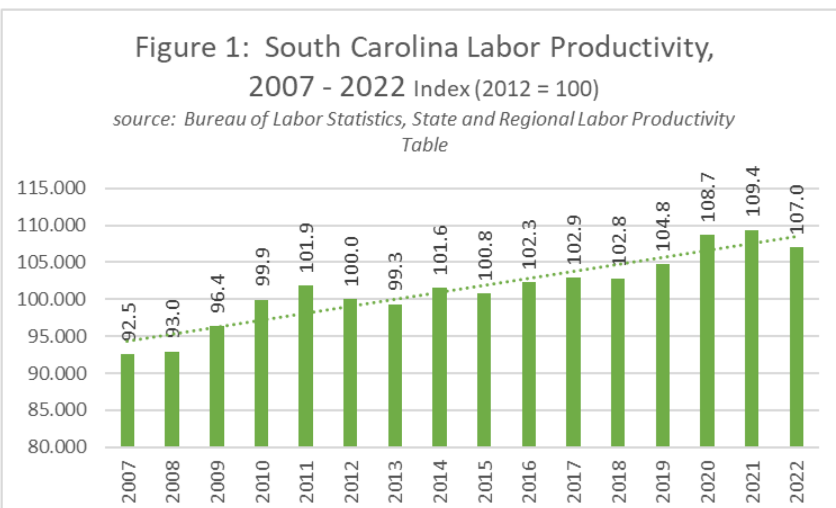
Center for Business Analytics and Community Research

Talent Tips: Labor Productivity and Regional Competitiveness

Recognizing the importance of people analytics, SAP, a leading producer of management and business process software, has released a document titled "100 Critical Human Capital Questions." Seven of the one hundred questions specifically address workforce productivity, while many other questions address productivity in a tangential manner.

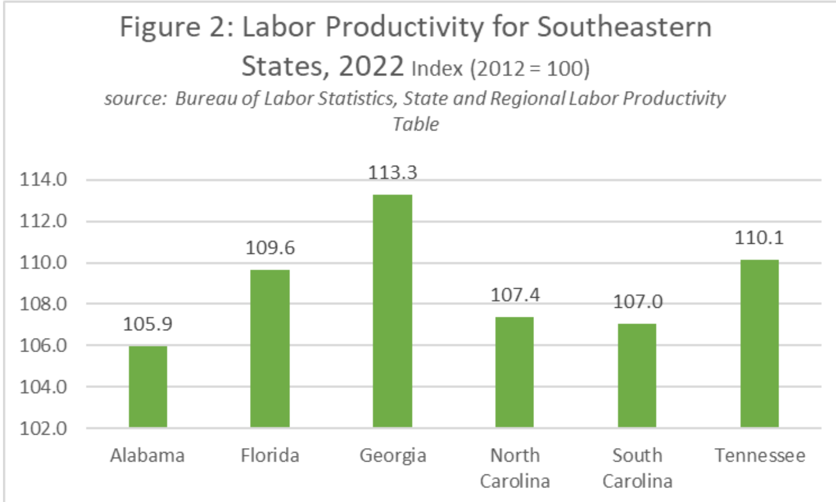


Productivity is a word that we often hear in business conversations, but it is not always fully understood. In many ways we should think of productivity as an engineering (and economic) concept. The Bureau of Labor Statistics (BLS) states that "labor productivity growth is what enables workers to produce more goods and service than they otherwise could for a given number of work hours." Producing more goods and services without working more hours or being able to produce the same output with fewer hours, potentially allows companies to increase profitability, thus helping to ensure future operations and economic contributions.

Figure 1 presents trend data on labor productivity in South Carolina since 2007, the year the "Great Recession" of the late 2010s began. There are a couple of key points to note when reviewing Figure 1. First, the base year is 2012 (index equals 100) and second, as we would expect, the general trend is upward sloping through time suggesting that labor productivity is increasing.

As can be seen in Figure 1, labor productivity decreased in South Carolina between 2021 and 2022. Given the competitive nature of attracting new investment to the state, it is interesting and informative to compare South Carolina's labor productivity to other states in the Southeastern region of the United States.

Again, using data from the BLS Figure 2 presents the 2022 index for labor productivity across six Southeastern states. Alabama has seen the slowest growth in productivity relative to the 2012 baseline and South Carolina has the second lowest growth. This raises legitimate questions that need to be answered.



Parsing out the factors that contribute to increased productivity can be challenging. In an online article titled "Productivity 101," the Bureau of Labor Statistics identifies the following as key factors impacting labor productivity:

- Technological advances
- Improved worker skills
- Improved management practices
- Economies of scale in production
- Increases in the amount of non-labor inputs used

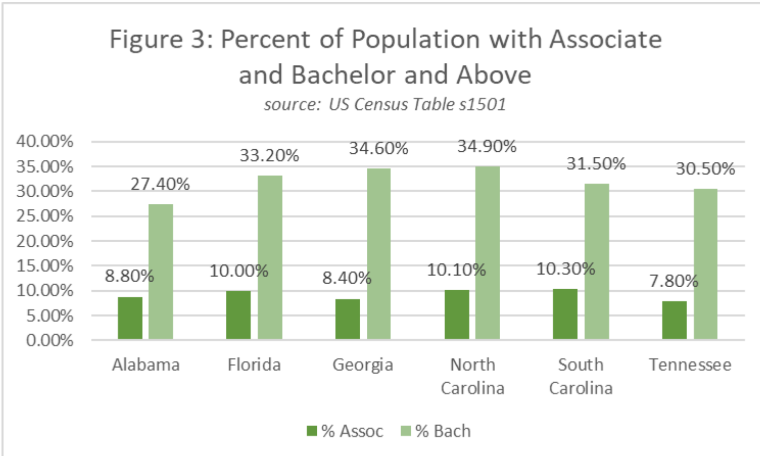
While the scope of this article does not allow for a full discussion of each of these factors, Table 1 shown below provides additional data from the Milken Institute's 2022 State Technology and Science Index that, in many ways, relates to BLS's factors. Given our focus on people and talent analytics, we have highlighted the human capital index. Unfortunately, South Carolina ranks below the other Southeastern states listed in the table.

Table 1: Milken Institute State of Technology and Science Index, 2022
Rank position from 1 to 50, with 1 being most preferred
http://statetechandscience.org/

	Alabama	Florida	Georgia	North Carolina	South Carolina	Tennessee
Research & Development	24	41	32	11	43	39
Risk Capital	41	13	21	7	36	31
Human Capital	35	42	26	24	44	41
Tech & Science Workforce	21	46	33	18	36*	36*

*Tie for 2022, Note: Definitions of each category provided here.

Education is a primary determinant of human capital development. Figure 3 provides U.S. Census data on degree attainment across these states.



South Carolina and Alabama have lower percentages of residents with Bachelor's degrees in the primary working population (25 years and older). This does tend to match the overall productivity outcomes for these two states. On a positive note, South Carolina has the highest percentage of the aforementioned population with an Associate degree, pointing towards our strong technical college system.

The productivity factors identified by the BLS, as well as the proxy measures from the Milken Institute index, are not perfectly correlated with productivity outcomes. However, it is likely that these data can effectively guide future discussions regarding productivity (labor and otherwise) and we encourage you to review the Milken Institute report. We are happy to be part of these conversations as we all seek to move the Upstate and South Carolina forward.